

**DISCRETE MATHEMATICS**  
**VOLUME 138, NUMBERS 1-3, 6 MARCH 1995**

**CONTENTS**

Preface	1
<i>Adelgren, T.</i> Triangle-free eulerian tours in graphs with maximum degree at most 4	5
<i>Aguiló, F. and M.A. Fiol</i> An efficient algorithm to find optimal double loop networks	15
<i>Anderson, I., S.D. Cohen and N.J. Finizio</i> An existence theorem for cyclic triplewhist tournaments	31
<i>Anthony, M., G. Brightwell and C. Cooper</i> The Vapnik-Chervonenkis dimension of a random graph	43
<i>Axenovich, M., D. Fon-Der-Flaass and A. Kostochka</i> On set systems without weak $3\Delta$ -subsystems	57
<i>Bang-Jensen, J., G. Gutin and J. Huang</i> Weakly Hamiltonian-connected ordinary multipartite tournaments	63
<i>Bang-Jensen, J., P. Hell and G. MacGillivray</i> Hereditarily hard $H$ -colouring problems	75
<i>Barefoot, C., K. Casey, D. Fisher, K. Fraughnaugh, F. Harary</i> Size in maximal triangle-free graphs and minimal graphs of diameter 2	93
<i>Bauslaugh, B.</i> Core-like properties of infinite graphs and structures	101
<i>Bierbrauer, J.</i> A family of 4-designs with block size 9	113
<i>Bowler, A.</i> On the fixed points of an automorphism of a symmetric design	119
<i>Broere, I., J.H. Hattingh, M.A. Henning and A.A. McRae</i> Majority domination in graphs	125
<i>Brouwer, A.E.</i> Variations on a theme by Weetman	137
<i>Brunat, J.M., M. Espona, M.A. Fiol and O. Serra</i> On Cayley line digraphs	147
<i>Bryant, D.E. and S. Oates-Williams</i> Mendelsohn designs associated with a class of idempotent quasigroups	161
<i>Buratti, M.</i> Constructions of $(q, k, 1)$ difference families with $q$ a prime power and $k=4, 5$	169
<i>Caro, Y., Y. Roditty and J. Schönheim</i> On colored designs — II	177
<i>Chapman, R.J. and B.S. Webb</i> A note on a lemma of Brauer	187

<i>Chopra, D.V.</i>	
On arrays with some combinatorial structure	193
<i>Cockayne, E.J., G. Fricke and C.M. Mynhardt</i>	
On a Nordhaus–Gaddum type problem for independent domination	199
<i>Cowling, P.</i>	
Strong total chromatic numbers of complete hypergraphs	207
<i>Cvetković, D. and S. Simić</i>	
On graphs whose second largest eigenvalue does not exceed $(\sqrt{5}-1)/2$	213
<i>Dunbar, J.E., F.C. Harris Jr, S.M. Hedetniemi, S.T. Hedetniemi, A.A. McRae and R.C. Laskar</i>	
Nearly perfect sets in graphs	229
<i>Grannell, M.J., T.S. Griggs and J.S. Phelan</i>	
Continuity of Mendelsohn and Steiner triple systems	247
<i>Harzheim, E.</i>	
On weakly arithmetic progressions	255
<i>Hochberg, R., C. McDiarmid and M. Saks</i>	
On the bandwidth of triangulated triangles	261
<i>Hoggar, S.G. and I. McFarlane</i>	
Faster fractal pictures by finite fields and far rings	267
<i>Hughes Jones, R.</i>	
Enumerating uniform polyhedral surfaces with triangular faces	281
<i>Jennings, D.</i>	
On packing of squares and rectangles	293
<i>Klavžar, S. and B. Mohar</i>	
The chromatic numbers of graph bundles over cycles	301
<i>Lewis, R.P. and S.P. Norton</i>	
On a problem raised by P.J. Cameron	315
<i>Meir, A. and J.W. Moon</i>	
On path entropy functions for rooted trees	319
<i>Paterson, K.G. and M.J.B. Robshaw</i>	
Storage efficient decoding for a class of binary be Bruijn sequences	327
<i>Preece, D.A.</i>	
How many $7 \times 7$ Latin squares can be partitioned into Youden squares?	343
<i>Preece, D.A. and B.J. Vowden</i>	
Graeco-Latin squares with embedded balanced superimpositions of Youden squares	353
<i>Ryjáček, Z. and I. Schiermeyer</i>	
On the independence number in $K_{1,r+1}$ -free graphs	365
<i>Sánchez-Arroyo, A.</i>	
A new upper bound for total colourings of graphs	375
<i>van Blanken, V., J. van den Heuvel and H.J. Veldman</i>	
Pancyclicity of hamiltonian line graphs	379
<i>Van Ngoc, N. and Z. Tuza</i>	
4-chromatic graphs with large odd girth	387

West, D.B.	393
Acyclic orientations of complete bipartite graphs	393
Wild, P.	397
Some families of semibiplanes	397
Research problems	405
Author index to volume 138	413

